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Rebuttal to City of Colfax comments on draft Cease and Desist Order NO. R5-2011-xxxx for the City of Colfax Wastewater Treatment Plant.

I want to thank the Board for this opportunity to rebut comments from the City of Colfax on draft Cease and Desist Order (CDO) R5-2011-xxxx for the City of Colfax Waste Water Treatment Plant (treatment plant). My rebuttal comments are as follows:

1. Page 1, Paragraph 1: Colfax states “in recent years, the City has made great strides in meeting discharge requirements, but has discovered previously unknown challenges to achieving all discharge requirements.”

Rebuttal: The “previously unknown challenges” referred to here is the large amount of seepage flowing into pond 3 during winter storms. It is simply not believable that the City had not known about this problem until recently.

- The City has 32 years of flow and pond level data for this treatment system.
- That data showed the City has had a persistent problem with pond 3 spills. During the life of the treatment system (based on the City's self monitoring reports -- SMRs), pond 3 has spilled hundreds of days, spilling hundreds of millions of gallons.
- Pond 3 continued to spill throughout the past decade, including a 17 million gallon spill in 2007 (the treatment system in operation at that time, the “interim plant”, had higher treatment capacity than the current plant).
- Since 2001, the City's permit has required that the Colfax plant have the ability to treat inflows from 100-year precipitation seasons, which should have caused the City to identify and analyze this seepage inflow problem before now.

The magnitude of this problem is illustrated by the City's need to bypass 25 million gallons of partially treated sewage last winter in order to avoid another spill – which clearly shows the treatment plant is too small.

2. Page 2, Paragraph 1: Colfax states “Through contracting operation assistance with Water Pollution Control Services, Inc. (WPCS), the City has brought the WWTP to a high level of performance. Most notably, the recent inspections have resulted in no violations at the WWTP.”

Rebuttal: There is real, documented data of recent violations. Data from the past 2 ½ years of self monitoring reports show Colfax has had hundreds of recent permit violations. And the plant incurred a 25 million gallon illegal bypass in March/April 2011.

3. Page 2, Paragraph 3: Colfax states “studies to determine if all seepage is collected have not been preformed to date.”

Rebuttal: The City has been repeatedly ordered to treat all inflows, and eliminate all seepages no matter where they occur. Complying with these orders would have required that the City analyze the source of the seepages. The City's failure to analyze the seepage sources simply represents a defiance of the Board's orders.

Note: Based on the above discussion, the City's proposed changes to Page 4, # 19 of the draft CDO, # 19 are inappropriate and should be stricken.

4. Page 2, Paragraph 3: The City refers to plans, specifications, and bids.

Rebuttal These documents are not a part of the administrative record, and have not been reviewed the public and apparently not by staff.

5. Page: The City makes a series of comments complaining that the ongoing litigation process is causing them financial stress and delaying their compliance with their permit.

Rebuttal: The City's comments grossly mischaracterize the ongoing litigation. The litigation process was initiated because Colfax had been chronically out of compliance with its permit. The principal objective of the litigation is to bring the City into compliance within the shortest practical timeframe. The City's ongoing problems with financial stress and delays in compliance are entirely of their own making.

6. Page 4, Paragraph 3: the City states “The litigation process has been used to delay the adoption of the financing package.”

Rebuttal: This statement is false. Plaintiffs only contact with State Board staff was my telephone conversations regarding their review process for the financial package hearing item; and at no time did I indicate a position in regard to the Board's approval of financing for the City's compliance efforts. Neither I nor other plaintiffs participated in the State Board's hearing on the financing package.

7. Page 4, Paragraph 3: the City states “Due to delays in refinancing, the City has been forced into a box limiting the actions the City could pursue making it nearly impossible to dewater Pond 3.

Rebuttal: The City has been under Board permit and CDO orders since 2001 to build a tertiary treatment plant with capacity sufficient to handle 100 year precipitation seasons, and to cease all leaks from pond 3. Water law does not provide exception to meeting permit requirements due to refinancing delays. The City's dewatering problems are due to problems it has created:

- The City is failing to acknowledge that the underlying reason it has problems dewatering pond 3 is that the new treatment plant, which came on-line in 2009, is too small. It has less than half the needed capacity.
- If the 2009 treatment plant upgrade had had sufficient capacity to meet the 100-year precipitation year requirement, dewatering pond 3 in preparation for lining would have been done by now.
- Since the City chose (in 2004) to cease the pond 3 leaks by lining the pond, they can not claim that the need to dewater that pond is a surprise. Their current scramble to find a means to dewater the pond is due to their long line of past failures, and should not be blamed on a the State Water Board's desire to hear the financing package.
- The City should have already begun activities to facilitate dewatering, such as fixing the current treatment plant so it can operate more consistently at current capacity without violations, and conducting geotechnical studies on subsurface flows into pond 3 (which would indicate if a cut-off trench above the pond was warranted).

8. Page 4, Paragraph 4: “the City request the flexibility in schedules and actions from the Central Valley Water Board to account for the limited finances of the City and the unpredictability of the litigation process.”

Rebuttal: After 3 decades of non-compliance the time for flexibility is over. The CDO should require implementation on a tight schedule and by a specific date.

9. Page 4, Paragraph 4: “The City is looking to prioritize activities based on cost effectiveness.”

Rebuttal: Any effort by the City to avoid compliance due to “cost effectiveness” is simply contrary to the Clean Water Act.

10. Page 4, Paragraph 5: The City states “There are no known seepages from pond 3 that circumvent the collection system.”

Rebuttal: This statement is false. The following seepages have been documented:

- The 2001 permit identified the side stream leak;
- The 2001 permit identified deep percolation through the bottom of the pond;
- The City's SMRs consistently show groundwater contamination in the monitoring well at the base of pond 3;
- The City's “Wastewater Treatment Plant Storage Pond Water Balance, Final Revision” noted on page 19 that “There is an approximate 0.25 MG/month loss from storage reservoirs unaccounted for in the water balance.” This is a strong indication that the uncollected seepage is at least of 3 million gallons per year and possibly much more.

11. Page 5, Paragraph 1: “The City asks for clarification that the seepage discharge to receiving water is contrary to Discharge Prohibition III., instead of simply seepage discharges from pond 3, as written in the CDO.”

Rebuttal: Any discharge other than at permitted discharge point is illegal. The permit and CDO can not allow otherwise. The City's request that Prohibition III.A only apply to seepage discharge to surface water must be denied.

12. Page 5, Paragraph 3: The City states that, in relation to the implementation of Alternative 1 for adding treatment capacity, the CDO findings should also include the statement “if necessary to increase treatment capacity or process stability at flows greater than 0.5 mgd”.

Rebuttal: Alternative 1 already faces serious questions in regard to its viability. During the cool season, discharges from the current plant frequently cause significant downstream odor problems. During the warm season the discharge often must be diverted to the ponds because of high turbidity (caused by algae from the ponds). Solving these existing problems warrants plant improvements before even considering higher treatment flow levels. The above statement implies that the City would simply push more water through the existing plant without making any changes to reduce current problems, which is not acceptable. Furthermore, it is not clear what the City means by the term “increase process stability”. This term should be clarified prior to the hearing on the CDO.

Note: Based on the above discussion, the City's proposed changes to Page 10, # 42 of the draft CDO are inappropriate and should be stricken.

13. Page 5, Paragraph 3: The City states “the city proposes to install a stand-alone ultraviolet disinfection system at the base of the Pond 3 dam for treatment and subsequent combination with the WWTP effluent.”

Rebuttal: The Clean Water Act requires a minimum of full secondary treatment – this proposal would violate the Act's core requirement. The permit for the Colfax plant

requires Title 22 tertiary treatment -- the CDO cannot allow less, and any effort to change the permit would violate its anti-backsliding provision.

14. Page 6, Paragraph 1: The City describes the stress test it proposes as a part of Alternative 1.

Rebuttal: It is unclear if the draft CDO is communicating that the Board would not enforce permit limits that were violated during the stress test. If so, this could represent a significant threat to public health and the environment. This would be an abdication of the board's responsibility to downstream users and uses.

Note: Based on the above discussion, the City's proposed changes to Page 10, # 42 of the draft CDO are inappropriate and should be stricken.

Also Note, the City's proposed changes to Page 12, # 43 and page 14, # 54.b of the draft CDO are inappropriate and should be stricken.

In addition, the City's proposed changes to Page 18, # 15 of the draft CDO, the concept of a stress test, needs to be rethought. Until this happens, these proposed changes need to be stricken.

Finally, as to the City's proposed changes to Page 20, order # 8 of the draft CDO -- Alternative 1 should not be implemented until the problems with the existing treatment plant are fixed, and stress test rethought.

15. Page 6, paragraph 2: "The City requests the Dry weather flow rate protection be extended through 2013 if the 2010-2011 precipitation levels are above 59.4 inches."

Rebuttal: It is important to point out the following facts:

- First, In the Clean Water Act litigation, the City and plaintiffs agreed that the City could delay lining pond 3 if seasonal rainfall exceeded certain levels – 59.4 inches being the first trigger. This agreement was based on an existing rain gage located near the City. Since then, a new gage, the "CFC" gage, has been activate at the treatment plant for year-round use. According to City engineers, this new gage consistently shows 35% more rain than the old gage for any given season. The City plan is to use the new gage, but keep the triggers developed using the old gage. The City's plan is completely inappropriate – either the old gage should be used, or a new agreement needs to be reached on a new trigger schedule using the new gage.
- Second, the 2010/11 precipitation season (already passed) had a level above 59.4 inches at the "CFC" gage located at the treatment plant. Presumably the above statement means that the City intends an extension since that this trigger has already been reached. If this is the case, they should simply ask for the extension.
- Third, the 59.4 inch precipitation trigger using the new CFC gage is approximately 2 inches less than an average precipitation year. That the City would ask for an exception for a drier than normal year underscores the inadequacy of capacity in their treatment plant.

16. Page 7, Paragraph 4: The City states "The effluent samples would be collected after the WWTP and temporary treatment flows are combined."

Rebuttal: This concept of monitoring combined effluent is unacceptable from a plant operations standpoint. If the City combines the effluent streams from the main treatment plant with those from the new disinfection system they propose for the base of the dam, and if the monitoring shows there is a problem (one or more constituents are exceeding WDRs) the City won't know which effluent stream is causing the problem, and thus will

have difficulty correcting it.

17. Page 7, Paragraph 7: The City states it would like to maintain an enhanced evaporation system after Pond 3 has been dewatered.

Rebuttal: As I discussed in my comments on the draft CDO, the enhanced evaporation system may cause increased odor problems in the area around the treatment plant. The City was using a similar water-handling approach in the early 2000s. That approach caused extensive odor problems, which were only stopped after the Placer County Air Pollution Control district made the City change their practices. The enhanced evaporation system should not be allowed if it causes odor problems.

Note: Based on the above discussion, the changes the City proposes on Page 20 of draft CDO, order # 12, may create serious odor problems. Alternative 3 should not be used if odor problems result in the area surrounding the treatment plant.

18. Figures 1 through 5: These figures show flows and pond levels at different rainfall amounts.

Rebuttal: The right-hand column of all of these figures show the amount of pond seepage that would be disinfected using the City's proposed Alternative 5. It is important to remember that (setting aside its many problems) Alternative 5 is proposed for dewatering only, and so should be temporary. Board members should not conclude that the pond levels depicted in these models would be representative of pond levels after pond 3 is lined and Alternative 5 is removed.


19. Figure 5: This table, entitled "Estimated maximum Precipitation to allow Pond 3 dewatering by the end of May, 2012" indicates that pond 3 can be dewatered by the end of May 2012 only if the maximum rainfall during the 2011/2012 precipitation is 48 inches or less.

Rebuttal: Based on this analysis, it appears virtually certain that the City can not dewater and line pond 3 in 2012 unless measures beyond those proposed in the draft CDO are taken. The analysis shows that to dewater the pond in 2012, the maximum seasonal rainfall must be less than 48 inches (the seasonal average at the CFC gage is 61 inches); and the treatment plant must run at or above capacity from October 1, 2011 onward. And yet Colfax had to divert discharge to the ponds due to high turbidity at least twice (for long periods) during October 2011, and as of the writing of this rebuttal in early November the plant is still diverting. This analysis shows the inadequacy of the draft CDO measures. As a result, the Board should order much more aggressive pond dewatering and treatment capacity measures, including at least the following:

- Immediate installation of a supplemental mobile tertiary treatment facility that would both help dewater pond 3 and treat excess winter inflows.
- Immediately impose a sewage hookup moratorium
- Immediately begin analysis and design of a plant expansion that gives the Colfax treatment system sufficient capacity to fulfill its permit responsibilities.
- A tight timeline and fixed deadlines for implementing the plant expansion project.

Thank you again for this rebuttal opportunity.

Sincerely,



Allen G. Edwards